

CLAIMS

Having thus described our invention, what we claim as new and desire to secure by Letters Patent is as follows:

1 1. A flat mail sleeve packaging system adapted to stack product
2 with bound edges in a constrained homogenous mass, comprising:
3 a first constraining wall having a first constraining surface; and
4 a second constraining wall having a second constraining surface,
5 the second constraining wall being positioned with respect to the first
6 constraining wall at a substantially perpendicular angle thereto,
7 wherein the first and second constraining walls are adapted for
8 having the product placed therebetween with the bound edges of the
9 product all facing in a same direction without collapsing.

1 2. The flat mail sleeve packaging system of claim 1, further
2 comprising a first binding member extending between a length of one of
3 the first and second constraining walls.

1 3. The flat mail sleeve packaging system of claim 2, further
2 comprising a second binding member, substantially perpendicular to the
3 first binding member, used to provide additional stability to a stack of the
4 product.

1 4. The flat mail sleeve packaging system of claim 1, wherein the
2 first and second constraining walls form a corner therebetween which is
3 adapted to conform to a corner of the product.

1 5. The flat mail sleeve packaging system of claim 1, wherein a
2 width of the first and second constraining walls is at last equal to a bound
3 edge and the non bound edge of the product stacked thereon.

1 6. The flat mail sleeve packaging system of claim 1, further
2 comprising a third constraining wall positioned parallel to the first
3 constraining wall and forming a corner with the second constraining wall.

1 7. The flat mail sleeve packaging system of claim 6, wherein the
2 second constraining wall is a central constraining wall and the first, second
3 and third constraining walls form a "U" shape.

1 8. The flat mail sleeve packaging system of claim 7, further
2 comprising a binding member extending along a length of the central
3 constraining wall.

1 9. The flat mail sleeve packaging system of claim 7, wherein the
2 first, second and third constraining walls each have a width at last equal to
3 a bound edge and the non bound edge of the product stacked thereon.

1 10. The flat mail sleeve packaging system of claim 7, further comprising an
2 endcap extending from an end one of the first constraining wall, second constraining wall
3 and the third constraining wall.

1 11. The flat mail sleeve packaging system of claim 10, further comprising an
2 endcap extending from an end one of the first constraining wall and second constraining
3 wall.

1 12. A flat mail sleeve packaging system adapted to stack product
2 with bound and non bound edges in a constrained homogenous mass,
3 comprising:

4 a first constraining wall having a first constraining surface, a
5 length and a width;

6 a second constraining wall having a second constraining surface, a
7 length and a width, the second constraining wall being positioned with
8 respect to the first constraining wall at a substantially perpendicular angle
9 thereto to form a corner therebetween which is adapted to conform to a
10 corner of the product; and

11 a first binding member extending between the length of one of the
12 first and second constraining walls, wherein

13 each width of the first and second constraining walls is at last equal
14 to the bound edge and the non bound edge of the product stacked thereon,

15 the first and second constraining walls are adapted for having the
16 product placed therebetween with the bound edges of the product all
17 facing in a same direction.

1 13. The flat mail sleeve packaging system of claim 12, further
2 comprising a second binding member, substantially perpendicular to the
3 first binding member, used to provide additional stability to a stack of the
4 product.

1 14. The flat mail sleeve packaging system of claim 12, wherein
2 the width of the first and second constraining walls is larger than the
3 bound edge and the non bound edge of the product stacked thereon.

1 15. The flat mail sleeve packaging system of claim 12, further
2 comprising a third constraining wall positioned parallel to the first

3 constraining wall and forming a corner with the second constraining wall
4 to thereby form a substantially "U" shape which is capable of
5 accommodating the product therebetween.

1 16. The flat mail sleeve packaging system of claim 14, wherein the
2 first binding member extends along the length of the second constraining
3 wall.

1 17. The flat mail sleeve packaging system of claim 15, wherein the
2 third constraining wall has a width at last equal to the bound edge and the
3 non bound edge of the product stacked thereon.

1 18. A method of stacking product in a same direction in a flat
2 packaging sleeve system having at least a first constraining wall and a
3 second constraining wall having a corner formed therebetween,
4 comprising the steps of:

5 stacking the product with all bound edges facing the same direction
6 towards either surface of the at least first constraining wall or second
7 constraining wall;

8 continuing to stack the product with all bound edges facing a same
9 direction until a length of the stacked product substantially equals a length
10 of the at least first constraining wall and second constraining; and

11 placing a binding member about the stacked product in a
12 lengthwise direction of one of the at least first constraining wall and
13 second constraining wall,

14 wherein the product is in a straight constrained homogenous mass
15 stack within the at least first constraining wall and second constraining
16 wall.

1 19. The method of claim 16, further comprising making a
2 determination whether the stack of the product is substantially a length of
3 the at least first constraining wall and second constraining wall prior to the
4 continuing step.

1 20. The method of claim 16, further comprising placing a second
2 binding member perpendicular to the first binding about the stacked
3 product.